

REMARKS

In response to the above-identified Office Action ("Action"), Applicant traverses the Examiner's rejection to the claims and seeks reconsideration thereof. Claims 1-6 are now pending in the present application. In this response, claims 1-4 have been amended, and no claims have been added.

I. Specification Amendments

In the outstanding Action, the Examiner requests a substitute specification excluding the claims because the specification is not in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b). Applicant respectfully submits herewith a substitute specification excluding the claims that has been amended to recite proper idiomatic English. Applicant further submits a clean version (without markings) and states the substitute specification contains no new matter. In view of the foregoing, Applicant respectfully requests reconsideration and entry of the attached substitute specification.

II. Claim Amendments

Applicant respectfully submits herewith amendments to claims 1, 2, 3 and 4. Applicant respectfully submits claims 2 and 3 are amended to incorporate the additional language suggested by the Examiner in the claim rejections under 35 U.S.C. §112. Claims 1 and 4 are amended to place the claims in proper English form pursuant to the Examiner's request. In addition, claims 2 and 3 are amended to place them in proper Markush format pursuant to the Examiner's request. Applicant respectfully submits the attached amendments to claims 1, 2, 3 and 4 do not add new matter and are supported by the specification. In view of the foregoing, Applicant respectfully requests consideration and entry of the attached amendments to the claims.

III. Claim Objections

In the outstanding Action, claims 1-6 are rejected on the basis of several informalities recognized by the Examiner. Applicant respectfully submits herewith amendments to the claims as discussed above, and in particular claims 1 and 4 noted by the Examiner, correcting the noted informalities. In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of the objection to claims 1-6 on this basis.

IV. Claim Rejections – 35 U.S.C. §112

Claims 2 and 3 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant respectfully submits the attached amendments to claims 2 and 3 in which the claims have been rewritten in proper Markush language and further amended to clarify where the recited coupling takes place pursuant to the Examiner's request.

For at least the foregoing reasons, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 2 and 3 under 35 U.S.C. §112, second paragraph.

V. Double Patenting

In the outstanding Action, the Examiner rejects claims 1-3 under the judicially created doctrine of obvious-type double patenting as being unpatentable over claim 1 of Do '287. Applicant respectfully submits herewith a timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) showing the conflicting patent is commonly owned by the instant application.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1-3 under the doctrine of obvious-type double patenting over Do '287 claim 1.

VI. Claim Rejections – 35 U.S.C. §102(b)

A. The Examiner rejects claims 1-3 under 35 U.S.C. §102(b) as being anticipated by Do et al., *"Nonlinear optical materials containing organic chromophores of dendrimer structures: Synthesis and Optical properties"*, (Photonics Conference 2002) ("Do 2002"). Applicant respectfully traverses the rejection for at least the reason that Do '2002 is not a proper reference.

Applicant respectfully submits, under 35 U.S.C. §102(b) the invention must be "patented or described in a printed publication...more than one year prior to the date of the application for patent in the United States"(emphasis added). The Do 2002 publication relied upon by the Examiner appears to have a publication date of October 30, 2002. See Do 2002, first page. Applicant filed the instant application on October 30, 2003 and claims priority to Korean applications 2003-29961 filed on May 12, 2003 and 2003-41480 filed on June 25, 2003. Thus, the priority date of the reference is not "more than one year" prior to Applicant's filing date and therefore may not serve as prior art under 35 U.S.C. §102(b).

For at least the foregoing reasons, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1-3 under 35 U.S.C. §102(b) over Do 2002.

B. Claims 1 and 3 are rejected under 35 U.S.C. §102(e) as being anticipated by U. S. Patent 6,784,287 issued to Do ("Do '287"). Applicant respectfully traverses the rejection on the basis that Do '287 is not a proper reference.

The Examiner indicates the rejection may be overcome by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived

from the inventor of this application and is thus not the invention "by another." Thus, Applicant respectfully submits herewith a Declaration pursuant to 37 C.F.R. §1.132 showing that any invention disclosed but not claimed in the reference was derived from the inventor of the instant application and is thus not an invention "by another" as suggested by the Examiner.

For at least the foregoing reasons, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1 and 3 under 35 U.S.C. §102(e) over Do '287.

C. Claims 1 and 3-5 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,252,025 issued to Wang ("Wang"). Applicant respectfully traverses the rejection for at least the following reasons.

In regard to claim 1, Wang fails to teach at least the element of "a polymer having a dendrimer structure based on ester linkages and/or ether linkages" as recited in claim 1. The Examiner alleges column 3, lines 48-62 of Wang teaches a dendritic polymer with multiple active end groups. This portion of Wang references hyperbranched polymers such as those disclosed in U.S. Patent Nos. 5,587,441 and 5,587,446 and copending U.S. Application Ser. Nos. 09/105,765 and 09/105,767. Applicant has reviewed U.S. Patent Nos. 5,587,441 and 5,587,446. U.S. Patent Nos. 5,587,441 and 5,587,446 expressly distinguish between hyperbranched polymers and dendrimers. In particular, U.S. Patent Nos. 5,587,441 and 5,587,446 recite that "[i]n contrast to hyperbranched polymers, regular dendrimers are regularly branched macromolecules with a branch point at each repeat unit" See U.S. Patent Nos. 5,587,441, column 2, lines 47-51 and 5,587,446, column 2, lines 43-48. U.S. Patent Nos. 5,587,441 and 5,587,446 further distinguish hyperbranched polymers from dendrimers on the basis of the different processes used to obtain the structures. Thus, it is clear from the teachings of both Wang and U.S. Patent Nos. 5,587,441 and 5,587,446 incorporated by reference into Wang, the disclosed hyperbranched polymers may not be relied upon to

teach Applicant's claimed polymer having a dendrimer structure based on ester linkages and/or ether linkages.

For at least the foregoing reasons, Wang fails to teach each of the elements of claim 1 therefore anticipation may not be found. Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. §102(b) over Wang.

In regard to dependent claims 3-5, these claims depend from claim 1 and incorporate the limitations thereof. Thus, for at least the reasons discussed in regard to claim 1, Wang fails to teach each of the elements of claims 3-5 therefore anticipation may not be found. Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 3-5 under 35 U.S.C. §102(b) over Wang.

D. Claim 6 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wang. Applicant respectfully traverses the rejection for at least the following reasons.

Claim 6 depends from claim 1 and incorporates the limitations thereof. Thus, for at least the reasons discussed in regard to claim 1, Wang fails to teach or suggest at least the element of "a polymer having a dendrimer structure based on ester linkages and/or ether linkages" as found in claim 6. In addition, the Examiner alleges claim 6 may be anticipated and/or obvious over Wang because the composition of the prior art is the same as that of the claim. Applicant respectfully disagrees with the Examiner's conclusion for at least the reasons previously discussed. In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 6 under 35 U.S.C. §102(b) or, in the alternative, under 35 U.S.C. §102(b) over Wang.

VII. Claim Rejections – 35 U.S.C. §103(a)

The Examiner rejects claims 1-3 under 35 U.S.C. §103(a) as being obvious over Do '287. Applicant respectfully traverses the aforementioned rejection on the basis Do '287 is an improper reference.

The Examiner notes in the Action that Do '287 has a common assignee and at least one common inventor with the instant application and therefore may be disqualified as a reference under 35 U.S.C. §103(c). Applicant respectfully submits pursuant to the Examiner's suggestion, that the instant application and Do '287 were, at the time the invention of the instant application was made, owned by Electronics and Telecommunications Research Institute. Thus, Do '287 is disqualified under 35 U.S.C. §103(c) as prior art in a rejection under 35 U.S.C. 103(a).

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1-3 under 35 U.S.C. §103(a).

VIII. Allowable Subject Matter

Applicant respectfully acknowledges with appreciation the Examiner's indication that no prior art was found that anticipates or renders obvious the elected species of claims 4-6.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending are now in condition for allowance and such action is earnestly solicited at the earliest possible date. If there are any additional fees due in connection with the filing of this response, please charge those fees to our Deposit Account No. 02-2666. Questions regarding this matter should be directed to the undersigned at (310) 207-3800.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR, & ZAFMAN LLP

Dated: December 27, 2005

By: Thomas M. Coester
Thomas M. Coester, Reg. No. 39,637

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, California 90025
(310) 207-3800

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail with sufficient postage in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P. O. Box 1450, Alexandria, Virginia 22313-1450 on December 27, 2005.

Jean Svoboda
Jean Svoboda